

## PATENT SPECIFICATION



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249,364

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## COMPLETE SPECIFICATION.

## Improvements in Imitation Candle and like Oil Lamps.

I, THOMAS TERRELL, Junior, of 118, Southwark Street, London, S.E. 1, a British subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to oil lamps of the kind known as candle lamps in which an oil reservoir which may simulate a candle contains absorbent material and communicates at its lower end with a funnel or receptacle which surrounds the reservoir and is adapted to receive the oil supply, the object of the invention being to provide an improved construction and arrangement of such lamps.

According to the invention the lamp comprises an oil reservoir containing absorbent material communicating at its lower end with the lower end of a funnel or receptacle which surrounds the reservoir and is open at its upper end to receive the oil supply, a wick raiser, and a chimney gallery telescoped on the upper end of the reservoir.

In the preferred form of construction, the filling receptacle which receives the oil supply consists of an upstanding tube supported on a base closed at its lower end by a base plug, said base, base plug and tube being united together so as to constitute a single unit without the use of solder, and the oil reservoir is removably fitted in this tube. The chimney support surrounds a wick tube provided with outer beads which engage an internal flange formed on the chimney support and an annulus which fits over the wick tube and extends between the wick tube and the chimney support. The wick extends downwardly from the wick tube through the absorbent material in the oil reservoir to a point at or near the bottom thereof.

An embodiment of the invention will now be described in detail with reference

to the accompanying drawings in which:—

Figure 1 is a view of the candle lamp shown in elevation, parts being broken away to show features of internal construction;

Figure 1<sup>a</sup> is an enlarged sectional view of the joint uniting the parts of the holder for the oil reservoir;

Figure 2 is a plan of a motor wheel adapted to carry a rotary shade for the lamp;

Figure 3 is a detail view of a bearing support for the motor wheel;

Figure 4 is a detail of the wick-raising mechanism of the lamp;

Figure 5 is a view showing a modification in which the lamp carries a fixed shade;

Figure 6 is a view showing a receptacle for liquids carried on the support for the motor wheel in place of the rotary shade.

Referring to Figures 1, 2, 3, and 4, 1 is the holder for the oil reservoir (hereinafter referred to as the candle holder) which includes a base 2, a base plug 6 and a candle-holder tube 11.

The base 2 has an upstanding peripheral flange 3, and an upwardly projecting flange 4 disposed above the plane of the bottom 5 of said base 2.

The base plug 6 has a central socket 7, the margin of said plug being reversely bent to produce outer and inner grooves or channels 8, 9, for reception of the flange 4 of the base 2, and the flange 10 of the candle holder tube 11, respectively, the parts of the joint thus formed being closely pressed together to firmly unite said plug 6, said candle-holder tube 11 and said base 2 without the use of solder.

The candle holder 1 is provided with a funnel 12 having a circular flange 13 extending into and fitting the upper end of said candle-holder tube 11, and said funnel has an interior annular flange 14

[Price 1/-]

Price 4s 6d

of the same size as the socket 7, within which a hollow imitation candle or oil reservoir 15 (hereinafter referred to as the "candle") loosely fits to leave a space 16 through which oil may flow into the channel between said candle-holder tube 11 and the body of said candle. The lower end of the candle 15 may be notched, as at 16a, to facilitate flow of oil into the cavity within it, and this cavity contains material 17 for absorbing oil introduced into the funnel 12. The candle 15 and the candle-holder tube 11 are slightly spaced from each other, and the channel between them has capacity for only a small amount of oil, the candle 15 itself constituting substantially the only reservoir for oil, so that should the lamp be upset there will be little, if any, oil to run out.

Within the candle is a wick 18 extending downward into the absorbent material 17, said wick being of such length as to admit of the raising of its upper end without disturbing its lower end. A wick raiser 19 resting in bearings 19a, and having a tooth wheel 20 which operates through a slot 21 in a wick tube 22, actuates the wick.

The wick tube 22 is provided with outer beads 24, 23, which, respectively, engage the internal flange 25 and an annulus 26 which fits over the wick tube and may be fixed to the candle 15, the flange being a feature of a chimney support 27, and the annulus extending from said chimney support 27 to said wick tube 22. Chimney support 27 telescopes over the upper end of the candle 15, and is provided with an external and preferably integral gallery 28 in which the lower end of the chimney 29 rests upon lugs 34, struck from the base of the gallery 28, so that air may enter said chimney below its lower edge. The aforesaid bearings 19a are displaced portions of the chimney support, and the upper end of the candle or reservoir 15 is slotted to accommodate the wick raiser 19.

The upper end of the chimney 29 may taper, and is provided with an external bead 30 for retaining a spring clasp 31 having an extension 32 which terminates in a horizontal and flattened arm 33. This arm 33 extends through and supports a cup-bearing 35 having open vertical slots 36 in its wall 37 for receiving said arm. 38 is the concave cup of said bearing, and within this cup is centered the pointed pivot 39 of a motor wheel 40 which is actuated by currents of air and products of combustion flowing upward through the chimney 29.

The motor wheel 40 has a hub 41, a rim 42 and blades 43, said blades

being inclined extensions of arms 44 which are radially disposed between said hub 41 and said rim 42. The rim is provided with three, or more than three, equally-spaced tongues 42a constituting anchorages for a shade 45 whose walls they penetrate.

The motor wheel and the shade are thus connected, and are compelled to rotate in unison. The hub 41, being conical in form, deflects the chimney currents against the blades of the motor 40, thereby increasing the efficiency of said motor.

In the formation of the shade, a blank is bent to form a truncated cone having over-lapping edges forming a joint 46. The shade being very light, the extra weight of material at the joint tends to tilt it. For this reason the pivot 39 of the motor 40 is disposed slightly off centre to thereby avoid tilting of the shade.

In Figure 5, a fixed shade 45a is shown attached to the ring 49 which rests on the chimney 29a. Arms 50, diverging upward from said ring 49, are connected to a shade-supporting ring 51, said arms 50 being prolonged at 52 so as to be extended through the body of the shade when the blank from which the shade is made is bent to conical form.

In Figure 6 is shown a receptacle 47, having a cavity 48, supported on the bearing 35 which has already been described and is shown in Figure 1, this receptacle being a holder for water or volatile medicaments.

It will be observed that the motor and the shade, shown in Figure 1, are interchangeable with the receptacle shown in Figure 6, and that by removing from the chimney the support shown in Figures 1 and 6 the shade shown in Figure 5 may be directly supported on the chimney of the lamp.

It will also be noted that, as shown in Figure 5, the flame of the lamp and the two ends of the arms 50 are in alignment, whereby said arms and the rings 49 and 51 throw a single minimum-sized shadow on the shade. This single shadow may be obscured by a band of ornamentation extending around the top of the shade, so that the shade as viewed by an observer will be shadowless.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An oil lamp comprising an oil reservoir containing absorbent material and communicating at its lower end with the lower end of a funnel or receptacle, which

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- surrounds the reservoir and is open at its upper end to receive the oil supply, a wick raiser, and a chimney gallery telescoped on the upper end of the reservoir.
2. An oil lamp comprising an oil reservoir containing absorbent material, a filling receptacle for supporting the base of said reservoir, a chimney gallery and wick raiser mounted on the upper end of said reservoir and means carried by the chimney to support a fixed shade, a rotary shade or an evaporator.
3. An oil lamp according to Claim 1 or 2 wherein the reservoir is mounted in an upstanding tube supported on a base and closed at its lower end by a base plug, the base, base plug and tube being united together so as to constitute a single unit without the use of solder.
4. An oil lamp according to Claim 3 wherein the reservoir is guided by an internal flange in said upstanding tube and engages at its lower end in a recess formed in said base plug.
5. An oil lamp according to Claim 3 or 4 wherein said base plug has a reversely bent margin forming inner and outer annular grooves or channels adapted to receive flanges formed on the base and upstanding tube respectively, said channels and flanges being closely pressed together to form a joint.
6. An oil lamp according to Claim 1 wherein said chimney gallery surrounds a wick tube formed with spaced beads which engage an internal flange formed on the chimney gallery and an annulus which fits over the wick tube and extends between the wick tube and the chimney gallery.
7. An oil lamp comprising a funnel or receptacle adapted to receive a supply of oil, an oil reservoir containing absorbent material fitted into said receptacle and communicating with the lower end thereof, a chimney gallery carrying a wick raiser removably fitted on the upper end of said oil reservoir and a wick extending downwardly through said absorbent material to a point at or near the bottom of said oil reservoir.
8. An oil lamp comprising a tubular funnel or receptacle fixed to a base, a tubular oil reservoir containing absorbent material fitted into said receptacle and communicating at its lower end with the lower end thereof, a chimney gallery telescoped on the upper end of the reservoir and a wick tube laterally supported by said chimney gallery.
9. An oil lamp constructed and adapted for use substantially as described with reference to the accompanying drawings.

Dated this 19th day of May, 1925. 65

FRANCIS HERON ROGERS,  
Agent for Applicant,  
Bridge House, 181, Queen Victoria  
Street, London, E.C. 4.

[This Drawing is a reproduction of the Original on a reduced scale.]

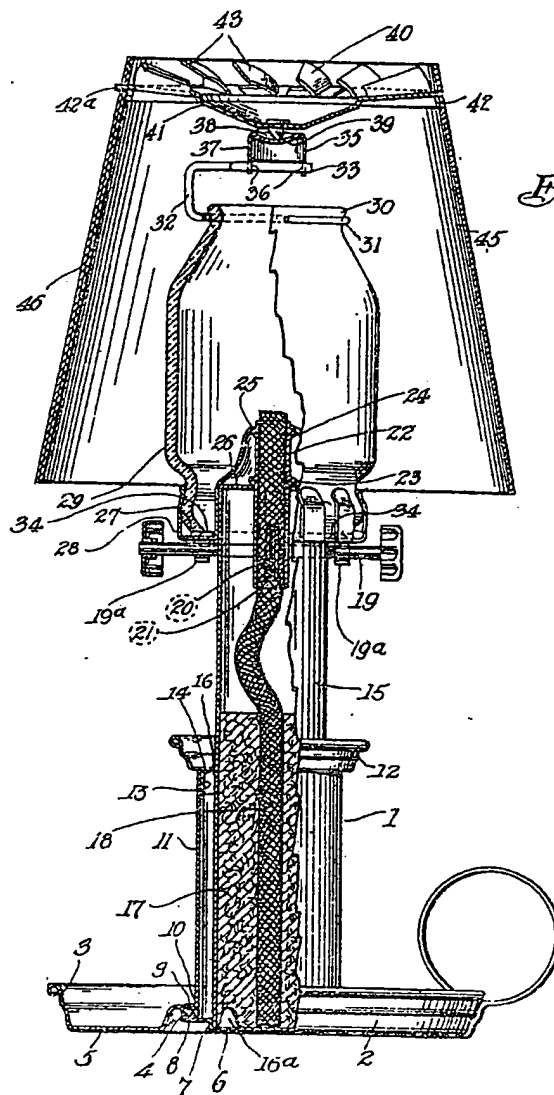


Fig. 1.

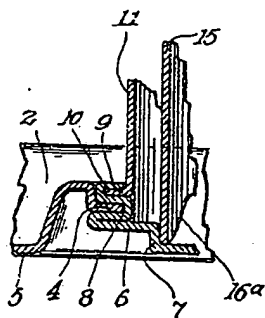
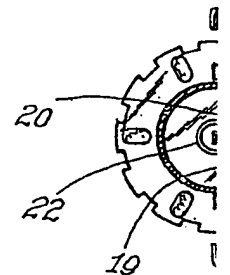
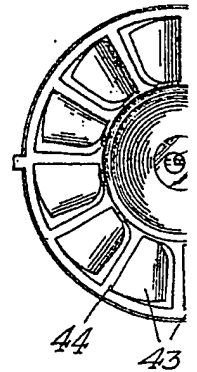
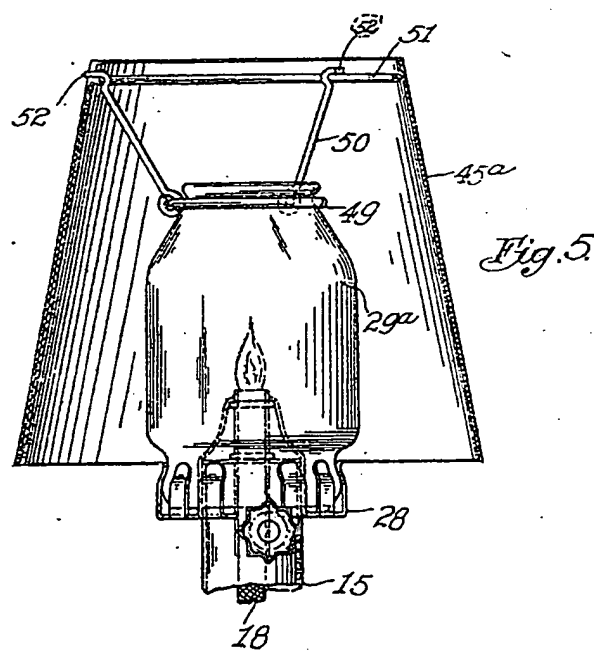
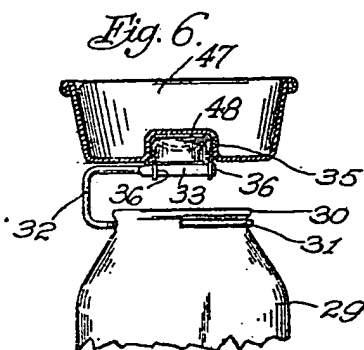
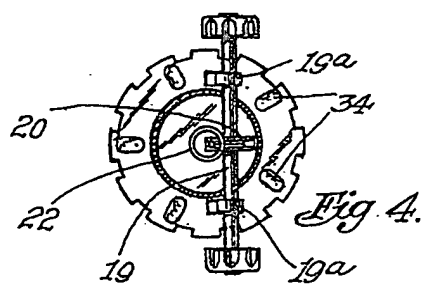
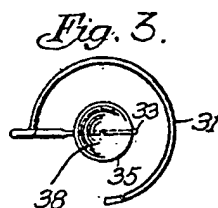
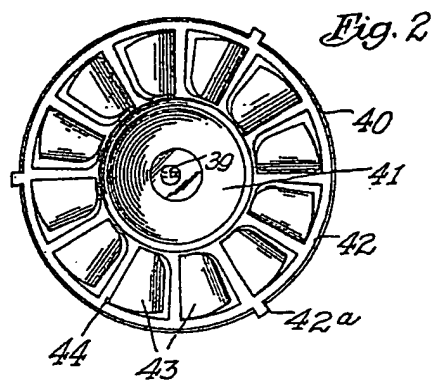
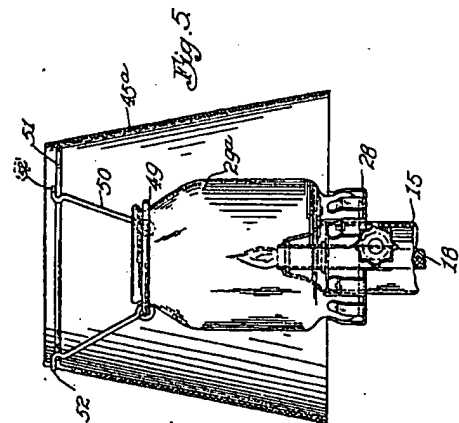
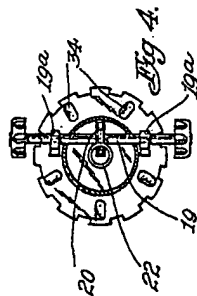
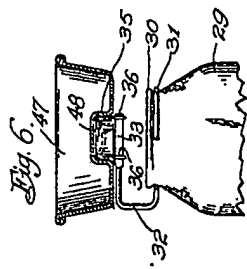
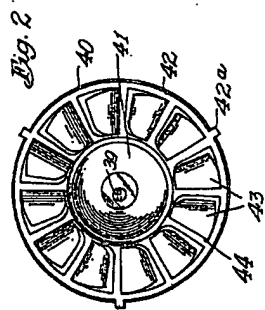
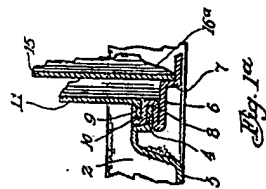
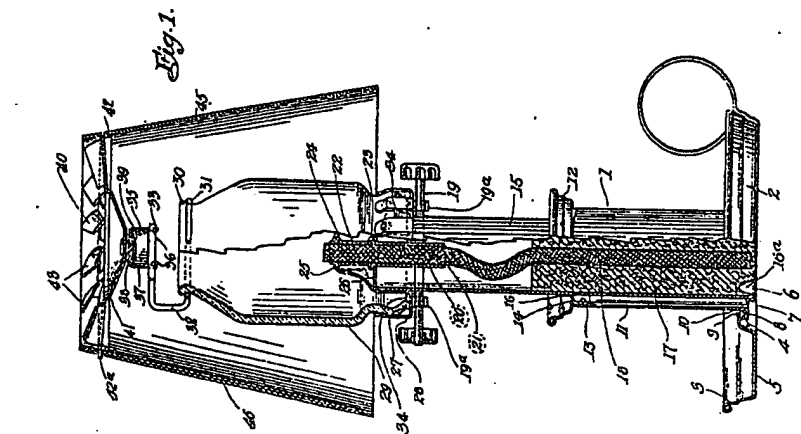


Fig. 1a



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